

CLAIMS:

1. A moving picture reception/decoding device decoding a bit stream encoded by a moving picture encoding/transmission device using a predetermined moving picture compression encoding method, characterized in that said moving picture
5 reception/decoding device comprises:

a control information creating unit that creates control information for controlling the operation of said moving picture encoding/transmission device; and

a control information transmitting unit that transmits said
10 control information to said moving picture encoding/transmission device.

2. The moving picture reception/decoding device as defined in claim 1 wherein said control information creating unit creates said control information at a predetermined interval.

3. The moving picture reception/decoding device as defined in claim 1 or 2 wherein said control information creating unit uses a message specified by the ITU-T recommendation H.245 as said control information.

4. The moving picture reception/decoding device as defined in claim 1 or 2 wherein said control information creating unit uses videoFastUpdate commands specified by the ITU-T recommendation H.245 as said control information.

5. The moving picture reception/decoding device as defined in claim 1 or 2 wherein said control information creating unit

uses a method specified by RFC3261 SIP (Session Initiation Protocol) as said control information.

6. The moving picture reception/decoding device as defined in claim 1 or 2 wherein said control information creating unit uses the INFO method specified by RFC3261 SIP as said control information.

7. A moving picture encoding/transmission device encoding video signals using a predetermined moving picture compression encoding method, transmitting a bit stream, characterized by comprising:

5 a control information receiving unit that receives control information for controlling the operation of said moving picture encoding/transmission device;

a control information analyzing unit that analyzes said control information and outputs encoding control information
10 for controlling said encoding, and

a moving picture encoding unit that executes said encoding according to said encoding control information.

8. The moving picture encoding/transmission device as defined in claim 7 wherein said moving picture encoding unit encodes at least a part of frames in an intra-frame encoding mode according to said encoding control information.

9. The moving picture encoding/transmission device as defined in claim 7 or 8 wherein said control information analyzing unit is able to analyze a message specified by the

ITU-T recommendation H.245 as said control information.

10. The moving picture encoding/transmission device as defined in claim 7 or 8 wherein said control information analyzing unit is able to analyze videoFastUpdate commands specified by the ITU-T recommendation H.245 as said control
5 information.

11. The moving picture encoding/transmission device as defined in claim 7 or 8 wherein said control information analyzing unit is able to analyze a method specified by RFC 3261 recommendation SIP as said control information.

12. The moving picture encoding/transmission device as defined in claim 7 or 8 wherein said control information analyzing unit is able to analyze the INFO method specified by RFC 3261 recommendation SIP as said control information.

13. A moving picture reception/decoding device decoding a bit stream encoded by a moving picture encoding/transmission device using a predetermined moving picture compression encoding method, characterized by comprising:

5 a control information creating unit that creates control information for controlling the operation of said moving picture encoding/transmission device;

a control information transmitting unit that transmits said control information to said moving picture
10 encoding/transmission device; and

a transmission band judging unit that outputs a control

information creating command for controlling said control information creating unit according to transmission band information calculated from received said bit stream.

14. The moving picture reception/decoding device as defined in claim 13 wherein said transmission band judging unit outputs said control information creating command that instructs the operation interval of said control information creating unit to
5 be changed according to said transmission band information and said control information creating unit changes the interval at which it creates said control information according to said control information creating command.

15. The moving picture reception/decoding device as defined in claim 13 wherein said transmission band judging unit outputs said control information creating command that instructs the operation of said control information creating unit to be started
5 according to said transmission band information and said control information creating unit creates said control information only when it receives said control information creating command.

16. The moving picture reception/decoding device as defined in any one of claims 13 to 15 wherein said control information creating unit uses a message specified by the ITU-T recommendation H.245 as said control information.

17. The moving picture reception/decoding device as defined in any one of claims 13 to 15 wherein said control information

creating unit uses videoFastUpdate commands specified by the ITU-T recommendation H.245 as said control information.

18. The moving picture reception/decoding device as defined in any one of claims 13 to 15 wherein said control information creating unit uses a method specified by RFC 3261 recommendation SIP as said control information.

19. The moving picture reception/decoding device as defined in any one of claims 13 to 15 wherein said control information creating unit uses the INFO method specified by RFC 3261 recommendation SIP as said control information.

20. A moving picture encoding/transmission device encoding video signals using a predetermined moving picture compression encoding method, and transmitting a bit stream, characterized by comprising:

5 a control information receiving unit that receives control information for controlling the operation of said moving picture encoding/transmission device;

 a control information analyzing unit that analyzes said control information and outputs encoding control information
10 for controlling said encoding;

 a moving picture encoding unit that executes said encoding according to said encoding control information; and

 a transmission band judging unit that outputs an encoding control information creating command for controlling said
15 control information analyzing unit according to transmission

band information calculated from said transmitted bit stream.

21. The moving picture encoding/transmission device as defined in claim 20 wherein said control information analyzing unit analyzes said control information and outputs said encoding control information only when it receives said
5 encoding control information creating command.

22. The moving picture encoding/transmission device as defined in claim 20 or 21 wherein said moving picture encoding unit encodes at least a part of frames in an intra-frame encoding mode according to said encoding control information.

23. The moving picture encoding/transmission device as defined in any one of claims 20 to 22 wherein said control information analyzing unit is able to analyze a message specified by the ITU-T recommendation H.245 as said control
5 information.

24. The moving picture encoding/transmission device as defined in any one of claims 20 to 22 wherein said control information analyzing unit is able to analyze videoFastUpdate commands specified by the ITU-T recommendation H.245 as
5 said control information.

25. The moving picture encoding/transmission device as defined in any one of claims 20 to 22 wherein said control information analyzing unit is able to analyze a method specified by RFC 3261 recommendation SIP as said control
5 information.

26. The moving picture encoding/transmission device as defined in any one of claims 20 to 22 wherein said control information analyzing unit is able to analyze the INFO method specified by RFC 3261 recommendation SIP as said control
5 information.

27. A gateway interconnecting networks between which a bit stream encoded by a moving picture encoding/transmission device using a predetermined moving picture compression encoding method is sent/received, characterized by comprising:

5 a control information creating unit that creates control information for controlling the operation of said moving picture encoding/transmission device; and

a control information transmitting unit that transmits said control information to said moving picture
10 encoding/transmission device.

28. The gateway as defined in claim 27 wherein said control information creating unit creates said control information at a predetermined interval.

29. The gateway as defined in claim 27 or 28 wherein said control information creating unit uses a message specified by the ITU-T recommendation H.245 as said control information.

30. The gateway as defined in claim 27 or 28 wherein said control information creating unit uses videoFastUpdate commands specified by the ITU-T recommendation H.245 as said control information.

31. The gateway as defined in claim 27 or 28 wherein said control information creating unit uses a method specified by RFC3261 recommendation SIP as said control information.

32. The gateway as defined in claim 27 or 28 wherein said control information creating unit uses the INFO method specified by RFC3261 recommendation SIP as said control information.

33. A gateway interconnecting networks between which a bit stream encoded by a moving picture encoding/transmission device using a predetermined moving picture compression encoding method is sent/received, characterized by comprising:

5 a control information creating unit that creates control information for controlling the operation of said moving picture encoding/transmission device;

 a control information transmitting unit that transmits said control information to said moving picture
10 encoding/transmission device; and

 a transmission band judging unit that outputs a control information creating command for controlling said control information creating unit according to transmission band information calculated from received said bit stream.

34. The gateway as defined in claim 33 wherein said transmission band judging unit outputs said control information creating command that instructs the operation interval of said control information creating unit to be changed according to

5 said transmission band information, and said control information creating unit changes the interval at which it creates said control information according to said control information creating command.

35. The gateway as defined in claim 33 wherein said transmission band judging unit outputs said control information creating command that instructs the operation of said control information creating unit to be started according to said
5 transmission band information; and

said control information creating unit creates said control information only when it receives said control information creating command.

36. The gateway as defined in any one of claims 33 to 35 wherein said control information creating unit uses a message specified by the ITU-T recommendation H.245 as said control information.

37. The gateway as defined in any one of claims 33 to 35 wherein said control information creating unit uses videoFastUpdate commands specified by the ITU-T recommendation H.245 as said control information.

38. The gateway as defined in any one of claims 33 to 35 wherein said control information creating unit uses a method specified by RFC 3261 recommendation SIP as said control information.

39. The gateway as defined in any one of claims 33 to 35

wherein said control information creating unit uses the INFO method specified by RFC recommendation 3261 SIP as said control information.

40. A moving picture communication system configured by connecting the moving picture reception/decoding device as defined in any one of claims 1 to 6 and 13 to 19, and the moving picture encoding/transmission device as defined in any
5 one of claims 7 to 12 and 20 to 26.

41. A moving picture communication system including the gateway as defined in any one of claims 27 to 39 and the moving picture encoding/transmission device as defined in any one of claims 7 to 12 and 20 to 26.

42. A moving picture communication method by a pair of a moving picture encoding/transmission device that encodes video signals using a predetermined moving picture compression encoding method and transmits a bit stream, and a moving
5 picture reception/decoding device that decodes the bit stream, comprising:

a step where said moving picture reception/decoding device creates control information for controlling the operation of said moving picture encoding/transmission device, and
10 transmits it to said moving picture encoding/transmission device;

a step where said moving picture encoding/transmission device analyzes said control information, outputs encoding

control information for controlling said encoding, and executes
15 said encoding according to said encoding control information;
and

a step where said moving picture reception/decoding
device decodes said bit stream encoded by said encoding
according to said encoding control information.

43. A moving picture communication method by a pair of a
moving picture encoding/transmission device that encodes video
signals using a predetermined moving picture compression
encoding method and transmits a bit stream, and a moving
5 picture reception/decoding device that decodes the bit stream,
comprising:

a step where said moving picture reception/decoding
device creates control information for controlling the operation
of said moving picture encoding/transmission device and
10 transmits it to said moving picture encoding/transmission
device;

a step where said moving picture encoding/transmission
device analyzes said control information, outputs encoding
control information for controlling said encoding, and executes
15 said encoding according to said encoding control information;
and

a step where said moving picture reception/decoding
device decodes said bit stream encoded by said encoding
according to said encoding control information and feeds

20 transmission band information calculated from said received bit stream back to the processing of creating control information; wherein

said moving picture reception/decoding device requests an image refresh operation corresponding to the reception band.

44. A moving picture communication method by a pair of a moving picture encoding/transmission device that encodes video signals using a predetermined moving picture compression encoding method and transmits a bit stream, and a moving
5 picture reception/decoding device that decodes the bit stream, comprising:

a step where said moving picture reception/decoding device creates control information for controlling the operation of said moving picture encoding/transmission device and
10 transmits it to said moving picture encoding/transmission device;

a step where said moving picture encoding/transmission device analyzes said control information and outputs encoding control information for controlling said encoding;

15 a step where said moving picture encoding/transmission device executes said encoding according to said encoding control information and transmission band information calculated from a transmitted bit stream; and

a step where said moving picture reception/decoding
20 device decodes said bit stream encoded by said encoding

according to said encoding control information; wherein

said moving picture encoding/transmission device performs an image refresh operation according to control information from the receiving side and the transmission band.